REMARKS

Applicants thank Examiner Li for the telephone conferences on August 25, 2006, and September 21, 2006, regarding the status and patentability of the claims.

New claims 65-79 have been added in this Amendment and are currently pending, following cancellation of claims 58-64. New claims 65, 71, and 75 are supported by the originally filed claims, on page 16, lines 11-13, of the specification, and as indicated below. New claims 66-68 and 75-79 are supported on page 20, lines 1-11, of the specification. Support for new claims 69, 70, 72-74, 78, and 79 is discussed below. None of these new claims adds new matter.

As discussed with Examiner Li, claims to polynucleotides have been canceled and only claims to polypeptides are presented. Furthermore, as discussed with Examiner Li, at least new claims 65-68 contain patentable subject matter and so are presented for consideration and allowance.

In addition to these claims, Applicants present new claims 69 and 72, which depend from claims 65 and 71, respectively, and recite the addition of a "heterologous peptide, polypeptide, or protein . . . ." This subject matter is supported on page 19, lines 10-20, of the specification, which provides "[i]n addition, the chimeric nucleic acid of the invention can comprise a sequence that encodes an antigenic polypeptide, or an antigenic portion thereof, from another virus or organism (a heterologous sequence)." Similarly, new claims 70 and 73, which depend from claims 69 and 72, respectively, recite "a B cell epitope, or a CD8 cell epitope," are supported by the Example on page 39, lines 13-17. Thus, these new claims do not add new matter and are enabled and supported by the written description of the specification.

Applicants have added new claim 71, which recites an isolated chimeric lyssavirus glycoprotein comprising the site III polypeptide of the glycoprotein from genotype GT1 Pasteur virus and the site II polypeptide sequence of the glycoprotein from genotype GT5 lyssavirus, as well as "c) a polynucleotide encoding a transmembrane domain of a transmembrane protein; and d) a polynucleotide encoding a cytoplasmic domain of a glycoprotein." Elements c) and d) are supported by the specification on page 18, line 20, to page 19, line 4 ("Thus, the present invention includes chimeric nucleic acids that comprise a sequence encoding site III of a lyssavirus glycoprotein that is functionally, operatively, and physically linked to a homologous or heterologous sequence encoding a transmembrane domain from natural or synthetic sequence encoding a transmembrane protein (or a portion thereof that is functionally equivalent to the transmembrane domain), and a sequence encoding a cytoplasmic domain (or a portion thereof that is sufficient to stably exist cytoplasmically) from a glycoprotein."). Thus, there is sufficient support for these claims in the specification and they do not add new matter to the application.

Applicants respectfully request that new claims 65-73 be allowed because they overcome the Examiner's concerns discussed in the telephone conference of August 25, 2006.

In addition, new claims 74-79 are presented for consideration, as agreed to by the Examiner in a telephone conference on December 22, 2006. These claims are the same as claims 65-79, but are directed to an isolated chimeric lyssavirus glycoprotein comprising "GT1 lyssavirus," instead of the specific "GT1 Pasteur virus." In support of these claims, page 24, lines 19-10, of the specification indicates that "[s]ite II and site III

can be obtained from any lyssavirus, and both can, but do not necessarily, come from the same lyssavirus." (Emphasis added.) Furthermore, Figure 1E provides a comparison of the deduced amino acid sequences of G proteins of selected lyssaviruses and demonstrates the high degree of conservation between GT1 strains, such as Pasteur virus (PV) and USA7-BT. Thus, the disclosures in the specification support chimeric lyssavirus glycoproteins made from any strain of GT1 to the same extent as Pasteur virus strain, which is characterized in the examples. Accordingly, Applicants respectfully request that new claims 74-79 be considered and allowed.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: January 3, 2007

By: _____

Deborah Katz
Reg. No. 51,863
Phone: 202-408-4382
Fax: 202-408-4400
Email: deborah.katz@finnegan.com